

METAL FABRICATION APPLICATION MATRIX

To find the appropriate PPE for any specific hazard shown, just click on the images to the right or the hazard name in the below table.



Occupation	Common Job Titles	Total Metal Fabrication Employment	What They do	Arm Injuries	Chemical	Crush	Cut and Crush	Cutting Oils	Heat, Hot Steel, and Burns	Impaired Vision	Indoor Outdoor Transition	Material Handling	Moving Rotary Parts	Oily Machine Parts	Pinch Points	Puncture	Sharp Objects	Small Part Handling	UV Radiation	Welding and Cut	Welding Sparks
Metal and Plastic Workers	Metalworker covers a wide range of titles, from Blacksmith to Forger to Skilled Worker.	517,490	You will find these workers welding, cutting, shaping, and forming metal pieces.	●			●		●	●		●	●				●	●	●	●	●
Machinists	Gear Machinist, Machine Operator, and Maintenance Machinist	132,180	You will find these workers replacing worn tools, sharpening dull cutting tools, and using cutter-grinding machines.	●	●		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Machine Tool Cutting Setters and Operators	CNC Machine setter, CNC machinist, and CNC Operator.	107,640	You will find these workers inspecting metal workpieces and operating machines, such as lathes, cutters, and shears to make metallic and plastic workpieces.	●			●	●		●		●			●	●	●	●			
Welding Cutters and Fitters	Maintenance Welder, Mig Welder, and Welder/Fabricator.	101,050	You will find these workers welding components in flat, vertical, or overhead positions.	●			●		●	●		●					●		●	●	●
Assemblers and Fabricators	Assembler, Fabricator.	92,980	You will find this worker assembling bolts, using many different types of tools, and moving heavy parts. They construct finished products and the parts that go into them. They use tools, machines, and their hands.	●		●	●		●	●	●	●		●	●	●	●	●			
Material Moving Workers	Tractor Operator, Truck Driver.	58,630	You will find these workers moving steel and other materials.	●			●		●	●	●	●					●	●			
Cutting, Punching, and Press Machine Setter	Die Setters, Press Operators, Machine Setters and Operators, Press Punch Operators.	58,220	You will find these workers aligning metal parts and grinding out burrs or sharp edges. This makes cut resistant gloves a high priority for this worker.	●	●		●	●	●	●		●	●		●	●	●	●			
Industrial Maintenance Workers	Lubricator, Maintenance Man, and Oiler	51,030	You will find these workers cleaning machines and machine parts. Cleaning solvents, oily parts, and metalworking fluids are a definite concern for these workers.	●	●			●		●		●	●	●			●	●			
Laborers and Material Movers, Hand	Laborer, Material Handler	47,920	You will find this occupation loading docks and moving materials to production areas.	●		●	●		●	●	●	●			●	●	●	●			
Inspectors, Testers, Sorters, Samplers, and Weighers	Quality Technician, Inspector, and Picker/Pacer	44,870	You will find this worker collecting samples of materials for testing and cleaning production equipment.					●		●		●					●	●			
Construction and Extraction Occupations	Carpenters, Electricians, Glaziers, Plumbers, Painters	41,560	You will find these workers constructing structures and handling equipment and tools	●	●	●	●		●	●	●	●			●	●	●	●			
Structural Metal Fabricators and Fitters	Fabricator, Mill Beam Fitter, Structural Steel Fitter, and Layout Man	36,850	You will find these workers positioning welding parts and moving parts into position	●		●	●		●	●	●	●			●	●	●	●	●	●	●
Helpers, Production Workers	Helper, Laborer, Support Team Member	32,370	You will find these workers supplying materials, handling tools, along with cleaning work areas and equipment.	●	●	●	●	●	●	●	●	●		●			●	●			
Coating, Painting, and Spraying Operators	Hand Sprayer, Painter, and Spray Painter	29,530	You will find these workers positioning spray guns and filling troughs with paint.		●			●		●		●									
Grinding, Lapping, Polishing, and Buffing Machine Operators	Deburrer, Finisher, Grinder, and Grinding Operator	26,170	You will find these workers sharpening edges and corners, along with polishing metal.	●		●	●		●	●		●		●	●	●	●	●			
Plating and Coating Machine Setters	Chrome Plater, Galvanizer, and Plater	23,850	You will find this worker operating coating machines to coat metal or plastic products with chromium, zinc, copper, cadmium, and nickel to protect or decorate surfaces.		●			●	●	●		●									
Sheet Metal Workers	Metalsmith, Metal Technician, Sheet Metal Fabricator, and Former	21,340	You will find these workers fabricating and installing products made from thin metal sheets.	●		●	●		●	●	●	●			●	●	●	●	●	●	●
Maintenance and Repair Workers, General	Maintenance Worker, Maintenance Mechanic, and Facilities Manager	18,720	You will find these workers pipe fitting, repairing equipment, and repairing buildings.	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Forming Machine Setters, Operators, and Tenders	Forger, Blacksmith, Hammer Operator, and Forge Press Operators	17,990	You will find these workers removing dies, forging hammers, and moving metalwork pieces.	●		●	●		●	●		●			●	●	●	●			
Lathe and Turning Machine Operators	Screw Machine Operator, Turn Operator, and Lathe Set Up Person	14,970	You will find these workers replacing worn tools, sharpening dull cutting tools, and using cutter-grinding machines.	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			
Industrial Machinery Mechanics	Fixer, Industrial, and Master Mechanic	14,580	You will find these workers cutting and welding metal to repair broken metal parts.	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Tools and Die Makers	Die Maker, Tool and Die Machinist, and Tool Repairer	14,040	Theses workers lay out metal stock, fit and assemble parts, and make and repair dies.	●		●	●		●	●		●			●	●	●	●			
Welding, Soldering, and Brazing Machine Operators	Fabricator, Mig Welder, Spot Welder, Fitter-Welder, and Braze Operators	10,060	You will find these workers adding material to work pieces, joining metal components, and annealing finished work pieces.	●			●		●	●		●							●	●	●
Heat Treating Operators	Burner, Heat Technician, Heat Treater	8,320	You will find this worker operating heating equipment to temper, harden, anneal, or heat-treat metal or plastic objects.	●					●	●		●									
Building and Cleaning Workers	Janitor	6,920	Janitors and building cleaners keep many types of buildings clean, orderly, and in good condition.		●			●		●	●	●									
Rolling Machine Setters and Operators	Rolling Mill Operator, Mill Operator, and Roll Form Operator	6,220	You will find these workers around shears, grinders, and adjusting machines.	●		●	●			●		●	●		●	●	●	●			
Milling and Planning Machine Setters, Operators	CNC Machine Operator, Machine Operator, Miller, and Milling Operator	4,730	You will find these workers securing, removing, and installing metal workpieces from machines.	●		●	●		●	●		●	●	●	●	●	●	●			
Extruding and Drawing Operators	Extrusion Operator, Operator, and Wire Mill Operator	4,540	You will find these workers operating machines to extrude or draw thermoplastic or metal materials into tubes, rods, hoses, wire, bars, or structural shapes.	●			●			●		●	●		●	●	●	●			
Structural Iron and Steel Worker	Iron Worker, Steel Fabricator, Structural Steel Erector, and Steel Worker.	3,390	You will find these workers connecting beams and aligning bolts.	●		●	●		●	●	●	●				●	●	●	●	●	●